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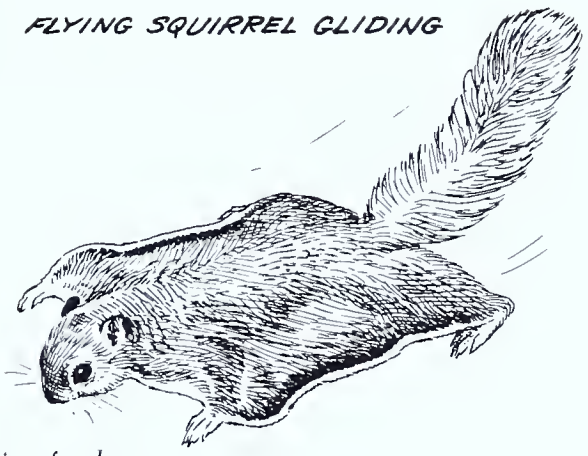
Meet the Squirrel Family



FLYING SQUIRREL GLIDING

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By NED SMITH

EVERYONE knows the gray squirrel. To small game hunters, rural lads, and habitues of city parks he is *the* squirrel. Nevertheless, he has a number of other relatives in Pennsylvania that are not so well known—some, in fact, are rarely seen by even the experienced woodsman.

To be strictly scientific about it, the squirrel family includes not only the tree squirrels and chipmunks, but the woodchuck as well. However, for our purpose we'll eliminate the latter. That leaves us with five species—the gray squirrel, the fox squirrel, the red squirrel, the flying squirrel, and the chipmunk. Of these, all but the chipmunk are arboreal, or tree-inhabiting, and he can climb fairly well when he has to. The flying squirrel is almost entirely nocturnal; the others are up and about during the daylight hours.

All squirrels have certain features in common. Being rodents they all have a pair of prominent incisors in the front of each jaw separated from the grinding teeth by a distinct space. All have four toes on the front foot and five on the hind foot, as well as moderately long to long tails covered with hair. The claws are very sharp, and the hind feet of the tree squirrels can be almost completely reversed to provide a better toe-hold when hanging head downward on the side of a tree trunk. The bushy tail, far from being completely ornamental, is a real aid in maintaining balance when scampering and leaping among the topmost branches.

1. Gray squirrel—This is by far the most common species of squirrel found in Pennsylvania. It is our "middle-sized" tree squirrel—smaller than the fox squirrel but larger than the red—and averages a trifle more than a pound in weight. Its color is chiefly salt-and-pepper gray above and dirty white beneath. The head is usually tinged with yellowish-brown, as are the feet and legs, especially in summer. The tail is darker with a white-edged effect caused by the white tips of the long tail hairs. In most specimens a faint brownish streak along each side separates the salt-and-pepper upper parts from the whitish belly. In winter there is less brown in the pelage, while the backs of the ears and the feet are usually white. "Black squirrels," quite common in parts of northern Pennsylvania, are merely a color phase of the gray squirrel. They occur in any shade from the typical gray to nearly jet black, but generally show a brownish tinge.

The gray squirrel is found throughout Pennsylvania wherever there are sizable wood lots, forested ridges, or extensive forests with an ample supply of mast and den trees. Two general types of dwellings are utilized—

dens and leaf nests. The former are suitable cavities in trees. Leaf nests are masses of twigs with the leaves still attached built among the branches or in a crotch of a tree. A cavity at its center is usually lined with shredded inner bark or similar material. The den tree is preferred as a winter residence but leaf nests are sometimes used in cold weather.

The young, from one to four per litter, are born in den trees in most instances, but occasionally in compactly built leaf nests. They are blind and helpless at birth and nearly two months old before the female leads them from the nest for short tree-top "strolls." Those born in the spring will reach adult size by hunting season; those from later summer litters will be noticeably smaller in November.

Gray squirrels eat a wide variety of foods—mushrooms, wild fruits, berries, buds, and seeds—but nuts of all kinds are the favored fare. Field corn, too, is eagerly "harvested," but only the germ at the base of each grain is eaten. Many nuts are buried individually in the ground for wintertime use and because large numbers go unrecovered the gray squirrel is credited with being an important factor in forest tree perpetuation.

While his vocabulary is by no means as complete as that of his cousin, the red squirrel, the gray does bark, chatter, and whine when the occasion demands it. The usual sound heard by hunters is a rasping bark frequently followed by a high-pitched whine of annoyance.

2. Fox squirrel — This rather rare member of the squirrel family is found chiefly in the western and southern parts of Pennsylvania. It usually avoids the mountains and extensive forest preferred by the gray squirrel, selecting instead small, parklike wood lots with a minimum of ground cover.

In Pennsylvania the fox squirrel is represented by three races. The western, and most common form, is salt-and-pepper gray frequently washed with buffy above, and buff to pale orange-brown below. The tail is edged with the color of the underparts.

The eastern form is similar in color to the gray squirrel, but is paler and has practically no brown in the pelage. Another race is roughly intermediate between the two in coloration and range.

The fox squirrel is larger and heavier than the gray, averaging nearly two pounds in weight. Its features are not so refined as its smaller cousin and it is obviously slower, lazier, and not nearly so agile on the ground or in the trees. When hunted it is not so likely to skedaddle out of a tree and head for other parts; instead it invariably hides in the tree in which it is discovered.

In food preferences, denning and nesting habits, etc., the fox squirrel is little different from its smaller relative.

3. Red squirrel—Measuring but a foot from its nose to the tip of its tail the red squirrel is our smallest diurnal tree squirrel. In summer pelage it is predominantly reddish brown, brightest on the upper side of the tail and along the backbone. The underparts are white, separated from the brown sides by a dark stripe.

The tail is somewhat marked with black, edged with buffy. A prominent white eye-ring gives the red squirrel a perky, wide-eyed appearance. In wintertime the pelage is decidedly grayer, but the reddish dorsal streak is even brighter by contrast. The ears acquire a fringe of long hairs.

If the red squirrel is small in stature he makes up for his lack of size in eloquence and impudence. It is difficult to imagine a more excitable creature. At the sight of an intruder he is usually only too happy to leave.

Like his larger cousins the red squirrel makes his home in both tree cavities and leaf nests, sometimes also remodeling abandoned bird nests with the addition of finer material and perhaps a roof of leaves. Avoiding large tracts of hardwoods he prefers ever-

CHIPMUNK
GRAY SQUIRREL
RED SQUIRREL
FLYING SQUIRREL
FOX SQUIRREL
NED SMITH

green woods, small wood lots, or forested river banks. His chief foods are the seeds of conifers, tulip tree seeds, nuts of all kinds, mushrooms, and to a lesser extent fruits, insects, buds, certain inner barks and an occasional bird egg or nestling. Evergreen cones, tulip tree fruits, and nuts are generally stored in underground chambers or in hollow stumps. Mushrooms are hung in the forks of tree branches, and nuts and cones are frequently cached in a similar manner. The most obvious signs of the presence of red squirrels are the midden heaps, large piles of pine cone scales, tulip tree seed scales, and other debris dropped beneath a favorite feeding spot.

4. Flying squirrel – It's a shame the flying squirrel is so completely nocturnal, for it is certainly one of the prettiest of all Pennsylvania mammals. Smaller than the red squirrel, it has a stubby muzzle and huge dark, liquid eyes that give it a remarkably innocent expression. Its thick fur is incomparably soft, olive-brown or gray-brown in color above, and white beneath. A loose flap of skin between the fore and hind legs on either side is stretched taut like a kite when the legs are extended, enabling the little animal to soar for long distances from tree to tree. The flattened tail serves variously as a rudder, brake, and parachute.

Two species, the southern and northern flying squirrels, occur in Pennsylvania. While they differ only slightly in appearance the southern species shows a distinct preference for conifers, the other living chiefly in hardwood forests.

Home to the flying squirrel is usually a woodpecker hole or other tree cavity, although it does build leaf nests similar to those of its larger relatives. Frequently a number of these animals are found living together in a hollow tree. Food—nuts, seeds, etc.—is stored in large quantities in tree cavities for winter use.

5. Chipmunk – This cute fellow is popular with outdoorsmen everywhere —and why not? Where can be found a prettier, cuter, cheerier, more industrious creature? I've always felt that he is to the mammal world what the chickadee is to the bird world.

The chipmunk is little bigger than a large mouse, with a moderately long, hairy tail. The predominant color of the upperparts is reddish brown, brightest on the rump. A dark streak runs through the eye; a pale streak appears above and below the eye. There's a blackish stripe down the middle of the back and a pale stripe bordered by two dark stripes running down each side of the back.

The chipmunk is primarily a woodland species, digging its burrows beneath stumps, under stone walls, and beside rocks or fallen logs. A second or third entrance is usually made in the open by digging from beneath, thus climinating the telltale mound of earth. Living quarters are in underground chambers and food is cached in subterranean storerooms in huge quantities. Throughout spring and summer the "chippy" lives on insects, mushrooms, berries, and seeds, but as autumn approaches he feverishly begins carrying underground all manner of nuts and seeds for wintertime use. He is aided in this activity by capacious cheek pouches. Although he hibernates during cold weather he apparently rouses from time to time and partakes of his hard-earned stores.

The young are born in the spring, but they are not permitted above the ground until more than half grown. Even then they do not venture far from the front door, into which they plunge at the slightest hint of danger. The chipmunk's "song" is an emphatic "chuck" repeated with tiresome frequency and persistence. The alarm note, usually emitted as the chippy dives into its burrow, is an extremely shrill, sometimes quavering, chip or chirp.

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